RS-232 to Bluetooth Quick Installation Guide

Introducing the *RS-232 to Bluetooth*

The *RS-232 to Bluetooth converter* allows any device with an RS-232 port to communicate wirelessly.

Features and Benefits

- Replaces RS-232 cable
- Full Bluetooth 2.0 support +EDR
- Easy to configure baud rate and master or slave role selectable
- Supports baud rates up to 115.2 K bps
- 300 feet (Enhanced Antenna); CLASS 1

System Requirements

- Pentium II or equivalent PC
- Windows 2000 and above

Package Contents

- *RS-232 to Bluetooth Converter* with Antenna
- Power adapter (5V, 500mA)
- Software CD
- Quick Installation Guide

Serial Number Sticker

For future product return or exchange, this serial number is required. Please keep if for your reference.

Layout

Figure 1: Layout

LED Indicators

See **Figure 2** on the next page for the location of the LEDs.

- **Red**: Power indicator - on all the time.
- **Green**: Before connecting to synchronize between the serial device and the **BT RS232 Config Tool** software, the green LED will be blinking.

After connecting to synchronize between the device and the **BT RS232 Config Tool** software, the green & red LED will blinked alternately.

DC-In Power Jack

Connect the power adapter to the power jack then plug the power adapter into a reliable power outlet. When power is properly supplied, the red LED will be on, see **Figure 2** on the next page.

> **Note**: If the serial port can provide 5V DC, 150mA on pin #9 of its DB9 connector, then the power adapter is not needed.

Figure 2

Antenna Connector

The connector is a standard Reverse SMA jack. Simply connect it to a 2.0dBi, 50 Ohms impedance dipole antenna to support 2.4 GHz frequency. (The Antenna is changeable for high gain Antenna), see **Figure 2.**

RS-232 (Serial)

Connect the RS-232 port into the device as you would with any computer and serial device, see **Figure 3**.

Figure 3: RS-232

Set-up Button

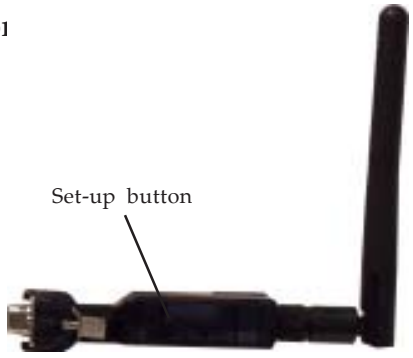


Figure 4

The purpose of the Set-up Button is for synchronizing between *RS-232 to Bluetooth Converter* and **BT RS232 Config Tool** software.

Hardware Installation

1. Connect the *RS-232 to Bluetooth Converter* to COM Port of PC. Connect the DC power adapter and jack into power outlet and DC-in outlet. You will see the red LED is going to be on and the green LCD will blink.
2. After running the **BT RS232 Config Tool** and finish configuration. Click the **Connect** icon in tool software and press the SET-UP button of the *RS-232 to Bluetooth Converter* immediately.
3. The green LED will turn on. The *RS-232 to Bluetooth Converter* is now active.

BT RS232 Config Tool Installation & Setup

When setting up *RS-232 to Bluetooth Converter* for the first time, you have to install and run **BT1.exe** as **BT RS232 config tool** first in your computer device. The utility CD is enclosed in the device box. Before you use *RS-232 to Bluetooth Converter*, you have to pair it with another E-BT232 device.

The *RS-232 to Bluetooth Converter* must be configured first before you use it. The purpose of configuration is to pair two devices for an exclusive connection between them, and pairing is done by utilizing Bluetooth address and PIN code.

- **Tool Installation**

Figure 5

When setting up the *RS-232 to Bluetooth Converter* for the first time, you have to install the utility software of **BT RS232 config tool** in your computer first which is an executable program in Windows environment. **SB-232 config tool** is used to detect and setup.

- **SB-232 Config Tool Parameters Configuration**

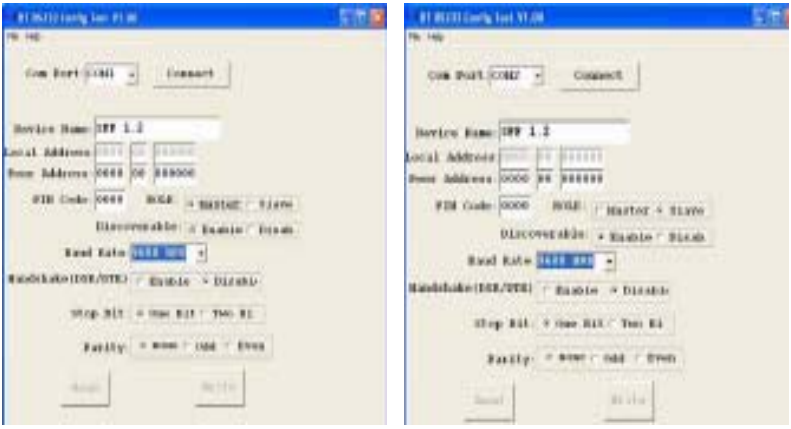


Figure 6

After double click the icon of BT1 as **BT RS232 Config Tool**, the configuration screen will be pop-up as the above picture.

A. COM Port Select COM port number, you have to avoid the port conflict with other device in computer and use available port number

B. Device Name

Select device name is for identify each one device and you can follow the name by tool access or retyping the new name by yourself.

C. Local Address

Local address will be automatically changed after finishing the parameter configuration to apply.

D. Peer Address

Peer address is for two or more devices to communicate in a same network address.

E. PIN Code

Device uses a **PIN Code** to identify during connecting and communication.

F. Role

Role is for identifying the role of the device as a master or slave. Select Master, for DTE mode, for Data Terminal Equipment (such as a PCs). Select **Slave** for DCE mode, for Data Communication Equipment (such as a Modem). You can setup your serial device as what type of the RS232 device you are going to connect in DTE or DCE mode to work with it.

G. Discoverable

Allows or denies the device detection by other Bluetooth devices.

H. Baud Rate

The baud rate range is 1200 bps-15.2K bps depends on transmission distance and environment. Normally, the default baud rate is set to 9600 bps N, 8 ,1.

I. Handshake (DSR/DTR)

The item of handshake is sat at the **Disable** item.

J. Stop Bit

The item of stop bit is sat at the **One Bit** item.

K. Parity

The item of parity is sat at the **None** item.

Apply **Connect**

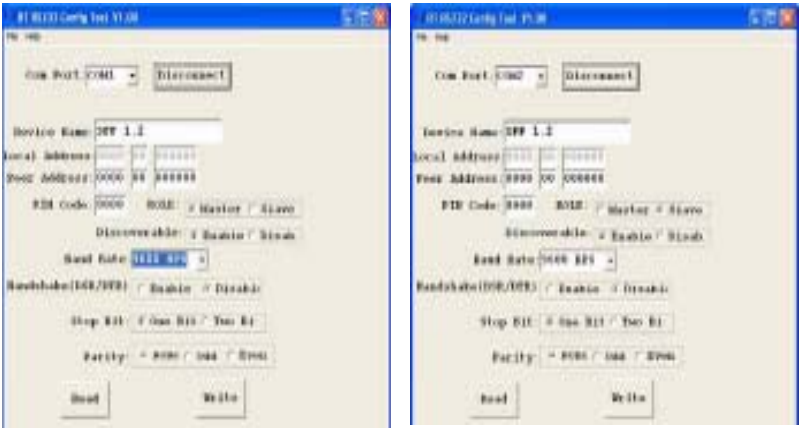


Figure 7

After finish the parameters configuration, click the **Connect** icon in **BT RS232 Config Tool** screen and immediately press the **Set-up** button on the left side of the device. **Connect** is changed to **Disconnect** when connection is successfull.

Apply **Write**

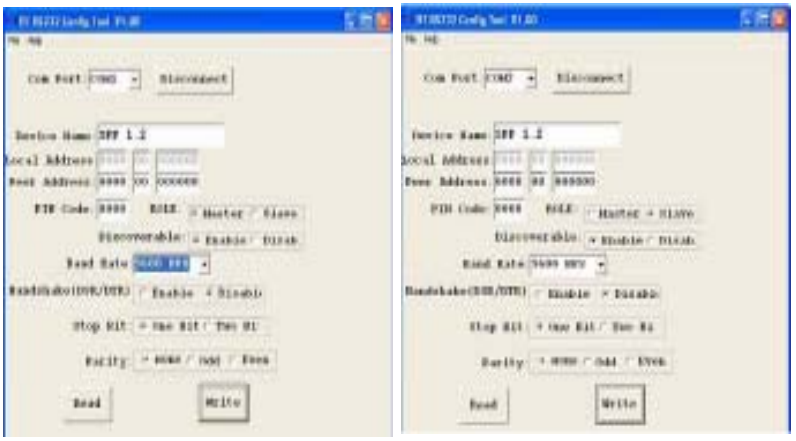


Figure 8

Click **Write**, to save all parameters after configuring into the **BT RS232 Config Tool**.

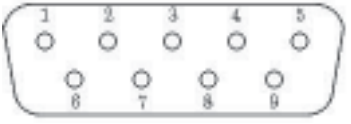
Apply **Read**

Figure 9

To click the item of **Read**, the meaning is to load all parameters as last time saving from the **BT232 Config Tool**. The local address will be updated the real device address at first time.

RS-232 Pin Assignment

The pin assignment scheme for a 9-pin male connector on a DTE is given below



Pin1: X
Pin 2: TXD
Pin 3: RXD
Pin 4: DSR
Pin 5: GND
Pin 6: DTR
Pin 7: CTS
Pin 8: RTS
Pin 9: DC 5V

RS-232 Wiring Diagram

Serial Device	SB-232 Converter	
2 RX	2 TX	
3 TX	3 RX	
5 GND	5 GRN	
4 DTR	4 DSR	(Flow Control)
6 DSR	6 DTR	(Flow Control)

Technical Support and Warranty

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B) If your purchase has passed the store's return policy period, please follow these steps to have the product repaired or replaced.

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Go to **www.siig.com**, click **Support**, then **RMA** to submit a request to SIIG RMA. If the product is determined to be defective, an RMA number will be issued.

Step 2: After obtaining an RMA number, ship the product.

- Properly pack the product for shipping. All software, cable(s) and any other accessories that came with the original package must be included.
- Clearly write your RMA number on the top of the returned package. SIIG will refuse to accept any shipping package, and will not be responsible for a product returned without an RMA number posted on the outside of the shipping carton.
- You are responsible for the cost of shipping. Ship the product to the following address:

  SIIG, Inc.
  6078 Stewart Avenue
  Fremont, CA 94538-3152, USA
  RMA #: _____

- SIIG will ship the repaired or replaced product via Ground in the U.S. and International Economy outside of the U.S. at no cost to the customer.

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PRODUCT NAME

RS-232 to Bluetooth Converter

FCC RULES: TESTED TO COMPLY WITH FCC PART 15, CLASS B OPERATING ENVIRONMENT: FOR HOME OR OFFICE USE

FCC COMPLIANCE STATEMENT:

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

THE PARTY RESPONSIBLE FOR PRODUCT COMPLIANCE

SIIG, Inc.
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